

The Invention Claimed Is:

1. A method of analyzing and servicing an imaging device comprising:
receiving data from the imaging device;
determining whether the received data matches existing data;
upon determining that the received data matches the existing data,
5 selecting an action to be taken that correlates with the matched existing data; and
adding the received data to the existing data.
2. A method as defined in claim 1 further comprising:
converting the received data into a quantifier value;
and wherein the determining step comprises determining whether the
quantifier value matches the existing data.
3. A method as defined in claim 2 wherein:
the existing data comprises a plurality of quantifier value ranges; and
the determining step comprises determining whether the quantifier value
is within one or more of the quantifier value ranges
4. A method as defined in claim 2 further comprising:
calculating a probability value indicating a degree of confidence that the
selected action to be taken is a correct action to be taken.
5. A method as defined in claim 2 further comprising:
adding together units of the received data to form the quantifier value.
6. A method as defined in claim 1 further comprising:
receiving feedback regarding a condition of the imaging device and a
service action taken to change the condition; and
correlating the feedback with the received data.
7. A method of analyzing and servicing imaging devices comprising:
for each imaging device of at least a portion of the imaging devices,
periodically reading object identifiers from the imaging device, calculating a quantifier
value from the object identifiers and recording the quantifier value; and
5 for at least one of the imaging devices:
taking action in response to a condition of the imaging device;
recording the condition and the action taken; and
correlating the condition and action taken with a most recent quantifier
value for the imaging device recorded prior to taking the action.

8. A method as defined in claim 7 wherein:
each imaging device corresponds to one of a plurality of types of
imaging devices;

and further comprising:

5 for each type of imaging device, indexing the quantifier value to the
object identifiers from which the quantifier value was calculated.

9. A method as defined in claim 7 further comprising:
calculating the quantifier value by adding together units of the object
identifiers.

10. A method as defined in claim 9 further comprising:
before calculating the quantifier value, converting the units of the object
identifiers into a hexadecimal form.

11. A method as defined in claim 7 wherein:
each imaging device corresponds to one of a plurality of types of
imaging devices;

and further comprising:

5 for each type of imaging device, combining quantifier values and
correlated conditions and actions taken for each imaging device to form a database of
ranges of quantifier values correlated with conditions and actions taken for imaging
devices of a same type.

12. A method as defined in claim 11 further comprising:
for each imaging device of the at least a portion of the imaging devices:
after calculating the quantifier values, looking up the quantifier values in
the database to find a matching range of quantifier values from the same type of the
5 imaging device; and

upon finding a match, taking action according to the condition and action
taken corresponding to the matching range of quantifier values.

13. A method as defined in claim 12 further comprising:
upon finding a match, calculating a probability value indicating a degree
of confidence that the condition and action taken are a correct condition and action
taken.

14. A method as defined in claim 7 wherein:
each imaging device corresponds to one of a plurality of types of
imaging devices;

and further comprising:

5 for each type of imaging device, combining quantifier values and correlated conditions and actions taken for each imaging device to form a database of quantifier values and correlated conditions and actions taken for imaging devices of a same type.

15. A method as defined in claim 14 further comprising:

 for each imaging device of the at least a portion of the imaging devices:

 after calculating the quantifier values, looking up the quantifier values in the database to find a matching quantifier value from the same type of the imaging
5 device; and

 upon finding a match, taking action according to the condition and action taken corresponding to the matching quantifier value.

16. A method as defined in claim 7 further comprising:

 combining quantifier values and correlated conditions and actions taken to form a database of quantifier values and correlated conditions and actions taken.

17. A method as defined in claim 16 further comprising:

 for each imaging device of the at least a portion of the imaging devices:

 after calculating the quantifier values, looking up the quantifier values in the database to find a matching quantifier value; and

5 upon finding a match, taking action according to the condition and action taken corresponding to the matching quantifier value.

18. A method as defined in claim 7 further comprising:

 for each imaging device of the at least a portion of the imaging devices, dividing the object identifiers from the imaging device into a plurality of sections, and calculating section quantifier values for each section; and

5 for the at least one of the imaging devices, correlating the condition and action taken with at least one most recent section quantifier value for the imaging device recorded prior to taking the action.

19. A method as defined in claim 7 wherein:

 the imaging devices are located within an enterprise;

 and further comprising:

 before calculating the quantifier value, sending the object identifiers
5 outside of the enterprise to an imaging device service center for analysis.

20. An imaging device service system comprising:
an object identifier data input;
a quantifier value calculator connected to the object identifier data input
to receive object identifier data from which a quantifier value is calculated;
5 a database in which quantifier data and action data are stored;
a quantifier value comparator connected to the quantifier value
calculator to receive the quantifier value and to the database to receive the quantifier
data, the quantifier value comparator comparing the quantifier value with the quantifier
data and generating a comparison result; and
10 a workflow action initiator connected to the quantifier value comparator
to receive the comparison result and to the database to receive the action data, the
workflow action initiator initiating a workflow action according to the comparison result
and the action data.

21. An imaging device service system as defined in claim 20 wherein:
the object identifier data is stored in the database indexed by the
quantifier data.

22. An imaging device service system as defined in claim 21 further
comprising:

a probability value calculator connected to the quantifier value
comparator to receive the comparison result and to the database to read preexisting
5 object identifier data, the probability value calculator reading the preexisting object
identifier data indexed by the quantifier data according to the comparison result, the
probability value calculator calculating a probability value based on the received object
identifier data and the preexisting object identifier data, the probability value indicating
a degree of confidence that the workflow action is a correct workflow action

23. An imaging device service system as defined in claim 20 further
comprising:

an action feedback data input; and
a database generator connected to the quantifier value calculator to
5 receive the quantifier value, to the action feedback data input to receive action
feedback data and to the database to store the quantifier data and the action data
therein;

and wherein:

the database generator correlates the quantifier value with the action

10 feedback data and adds the quantifier value and the action feedback data to the quantifier data and the action data, respectively, in the database.

24. An imaging device service system as defined in claim 20 further comprising:

a plurality of imaging devices having the object identifier data;

a means for reading the object identifier data from the imaging devices

5 and transferring the object identifier data to the object identifier data input.

25. An imaging device service system comprising:

a means for receiving object identifier data from imaging devices;

a means for quantifying the object identifier data for the imaging devices into current quantifier values;

5 a means for comparing the current quantifier values with previous quantifier values to find any matches; and

a means for generating an action order in response to finding a match between at least one of the current quantifier values and at least one of the previous quantifier values.